

1           1.    A method comprising:  
2                detecting a color characteristic;  
3                detecting motion; and  
4                controlling a processor-based system based on the  
5   detection of motion and a color characteristics.

1           2.    The method of claim 1 including controlling a  
2   processor-based system based on the detection of flesh  
3   color and the detection of a shape associated with a human  
4   being.

1           3.    The method of claim 2 including determining  
2   whether to process image data depending on whether both  
3   motion and flesh are detected.

1           4.    The method of claim 2 including capturing a frame  
2   of video at a time, and determining after capturing each  
3   frame whether or not flesh color has been detected.

1           5.    The method of claim 4 including removing the  
2   flesh color from the captured video.

1           6.    The method of claim 5 including moving an  
2   animation object while capturing video and removing the  
3   detected flesh color from the captured video.

1           7.    The method of claim 1 including capturing video  
2   of an animation object in a plurality of different  
3   positions and automatically removing an image of a user's  
4   hand from the captured video.

1           8.    An article comprising a medium storing  
2   instructions that enable a processor-based system to:  
3                detect a color characteristic;  
4                detect motion; and  
5                control a processor-based system based on the  
6   detection of motion and the color characteristic.

1           9.    The article of claim 8 further storing  
2   instructions that enable the processor-based system to be  
3   controlled based on the detection of flesh color and the  
4   detection of a shape associated with a human being.

1           10.   The article of claim 9 further storing  
2   instructions that enable the processor-based system to  
3   determine whether to process image data depending on  
4   whether motion and flesh are detected.

1           11.   The article of claim 9 further storing  
2   instructions that enable the processor-based system to  
3   capture a frame of video at a time and determine after  
4   capturing each frame whether flesh color has been detected.

1           12. The article of claim 9 further storing  
2 instructions that enable the processor-based system to  
3 remove the flesh color from the captured video.

1           13. The article of claim 12 further storing  
2 instructions that enable the processor-based system to  
3 capture video of an animation object in a plurality of  
4 different positions and automatically remove an image of a  
5 user's hand from the captured video.

1           14. A system comprising:  
2           a processor;  
3           a storage coupled to said processor storing  
4 instructions that enable the processor to detect motion and  
5 a color characteristic and to control the system based on  
6 the detection of motion and the color characteristic.

1           15. The system of claim 14 wherein said storage  
2 further stores instructions that enable the processor to  
3 detect a shape associated with a human being.

1           16. The system of claim 14 further storing  
2 instructions that enable the processor to determine whether  
3 to process image data depending on whether motion and flesh  
4 color are detected.

1           17. The system of claim 14 including a digital imaging  
2 device coupled to said processor.

1           18. A method comprising:  
2           capturing a video image of a speaker;  
3           receiving audio information from the speaker  
4 through at least one microphone;  
5           determining the user's position; and  
6           based on the user's position, adjusting a  
7 characteristic of the microphone.

1           19. The method of claim 18 including receiving audio  
2 information from a pair of microphones and adjusting the  
3 sensitivity of the microphones based on the relative  
4 positioning of the user with respect to each microphone.

1           20. The method of claim 18 including tracking the  
2 user's facial position in two dimensions and estimating the  
3 user's facial position in a third dimension.

1           21. The method of claim 18 including tracking the  
2 user's facial position in three dimensions.

1           22. The method of claim 18 including using a point of  
2 source filter to adjust the audio information received from

3 the user and providing said adjusted audio information to a  
4 speech recognition engine.

1 23. A system comprising:  
2 a video capture device for capturing an image of a  
3 user;  
4 at least one microphone for capturing speech from  
5 said user;  
6 a device to determine the user's position with  
7 respect to at least two microphones and to adjust the data  
8 from each microphone in response to the user's position  
9 relative to each microphone.

1 24. The system of claim 23 including a pair of video  
2 cameras for capturing an image of said user.

1 25. The system of claim 23 including a two dimensional  
2 face tracker that locates the user's face in two dimension.

1 26. The system of claim 23 including a three  
2 dimensional face tracker that locates the user's face in  
3 three dimensions.

1 27. The system of claim 23 including a point of source  
2 filter to adjust the sensitivity of said microphones.

1           28. A method comprising:  
2           identifying a color;  
3           identifying motion; and  
4           using identified color and motion to implement  
5 background segmentation.

1           29. The method of claim 28 including determining areas  
2 that are moving of a particular color.

1           30. The method of claim 29 including identifying  
2 objects that are connected to moving objects of a particular  
3 color.